Honeywell

SMARTLINE
CONFIGURATION TOOLKIT
SCT 3000

Installation and Start-Up Guide

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TotalPlant

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About This Document

Revision Notes

The following list provides notes concerning all revisions of this document.

Doc ID	Rel ID	Date	Notes
34-ST-10-08	D	03/00	Serial interface capability and STT150 support.
	C	12/98	Release 200. Flow Compensation Wizard.

References

The following list identifies all documents that may be sources of reference for material discussed in this publication.

Document Title	Doc ID
SMV 3000 Smart Multivariable Transmitter User's Manual	34-SM-25-02
ST 3000 Smart Transmitter Release 300 User's Manual	34-ST-25-14
STT 3000 Version 350 User's Manual	34-ST-25-12
STT 3000 Series STT250 Operator Manual	EN1I-6190
STT 3000 Series STT150 Operator Manual	EN1I-6248
MagneW 3000 Electromagnetic Flowmeter User's Manual	36-KI-25-01
MagneW 3000 PLUS Electromagnetic Flowmeter	36-KI-25-02

Contacts

World Wide Web

The following lists Honeywell's World Wide Web sites that will be of interest to our industrial automation and control customers.

Honeywell Organization	WWW Address (URL)
Corporate	*http://www.honeywell.com*
Industrial Automation and Control	*http://www.iac.honeywell.com*
International	*http://www.honeywell.com/Business/global.asp*

Telephone

Contact us by telephone at the numbers listed below.

	Organization	Phone Number	
United States and Canada	Honeywell Inc. Industrial Automation and Control	1-800-343-0228 1-800-525-7439	Sales Service
Asia Pacific	Honeywell Asia Pacific Inc. Hong Kong	(852) 8298298	
Europe	Honeywell PACE Brussels, Belgium	[32-2] 728-2111	
Latin America	Honeywell Inc. Sunrise, Florida U.S.A.	(305) 364-2355	

Symbol definitions

The following table lists those symbols used in this document to denote certain conditions.

Symbol	Definition
	This CAUTION symbol on the equipment refers the user to the Product Manual for additional information. This symbol appears next to required information in the manual.
	This WARNING symbol on the equipment refers the user to the Product Manual for additional information. This symbol appears next to required information in the manual.
	WARNING: risk of electrical shock. This symbol warns the user of a potential shock hazard where HAZARDOUS LIVE voltages greater than 30 Vrms, 42.4 Vpeak, or 60 VDC may be accessible.
	ATTENTION, Electrostatic Discharge (ESD) hazards. Observe precautions for handling electrostatic sensitive devices

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SCT 3000 Smartline Configuration Toolkit

Model Selection Guide

Instructions

- Select the desired key number. The arrow to the right marks the selection available.
- Make one selection from each table, I, II and III, using the column below the proper arrow. If no options are desired, specify 00.
  A dot (•) denotes unrestricted availability. A letter denotes restricted availability.

Key Number		I		II (Optional)	
_ _ _ _ _ _	-	_ _ _	-	_ _ , _ _ _ _	+ XXXX

KEY NUMBER		Selection	Availability
Description			
Smartline Configuration Toolkit		SCT101	↓
TABLE I			
None		0	-
Cable Length	6 Ft. - Standard	0	•
	20 Ft.	_1_	-
	None	X	•
Installation Guide & Software	Inst. Guide & 3.5" Disks - Standard	1	•
	Inst. Guide & CD ROM	_ _ 2	-
	None	_ _ X	-
TABLE II - Options			
None		00	-
RS-232 Hardware for STT150 Configuration		ST	•
TABLE III			
Factory Identification		XXXX	•

Note: Software upgrades can be ordered through Honeywell Worldwide Software Control. Please e-mail Sue Shea.

Example: SCT101-002-00 + XXXX

1— Introduction

Smartline Configuration Toolkit

Honeywell's **Smartline**â **Configuration Toolkit, SCT 3000** provides a cost-effective and efficient means to configure, calibrate, diagnose and monitor Honeywell's Smart field devices. The SCT 3000 is an engineering and maintenance software application designed for ease-of-use and increased productivity. The SCT 3000 runs on a Windows™-based personal computer specifically to support Honeywell's Analog and Digitally Enhanced (DE) protocols in nonhostile, general-purpose field environments.

Toolkit Contents

The Smartline Configuration Toolkit consists of the following items:

1. **SCT 3000 software media**

   Application CD ROM labeled "SCT 3000 Smartline Configuration Toolkit"

   -or- Application diskettes labeled "SCT 3000 setup disks"

2. **Hardware options -**

   – If you ordered the Smartline Option Module, you should have:

   (1) PC Card (credit card-size PCMCIA card)

   (1) Line Interface Module (LIM) with captive cable

   (2) adapter cables (1 with alligator clips; 1 with easy hooks)

   – If you ordered the serial hardware interface, you should have:

   (1) Serial hardware interface module

   (1) Interface Cable with connectors on both ends

3. **Paper documentation**

   (1) SCT 3000 Start-up & Installation Manual (34-ST-10-08)

Note: An individual order may differ from this list as allowed by the Model Selection Guide. For example, you may have ordered the SCT 3000 application on CD rather than on diskettes, or you may have opted to omit the *SCT 3000 Start-up &*

Installation Manual from your order. Please check the purchase order against the items shipped in the box. Figure 1 illustrates the components that make up the SCT 3000.

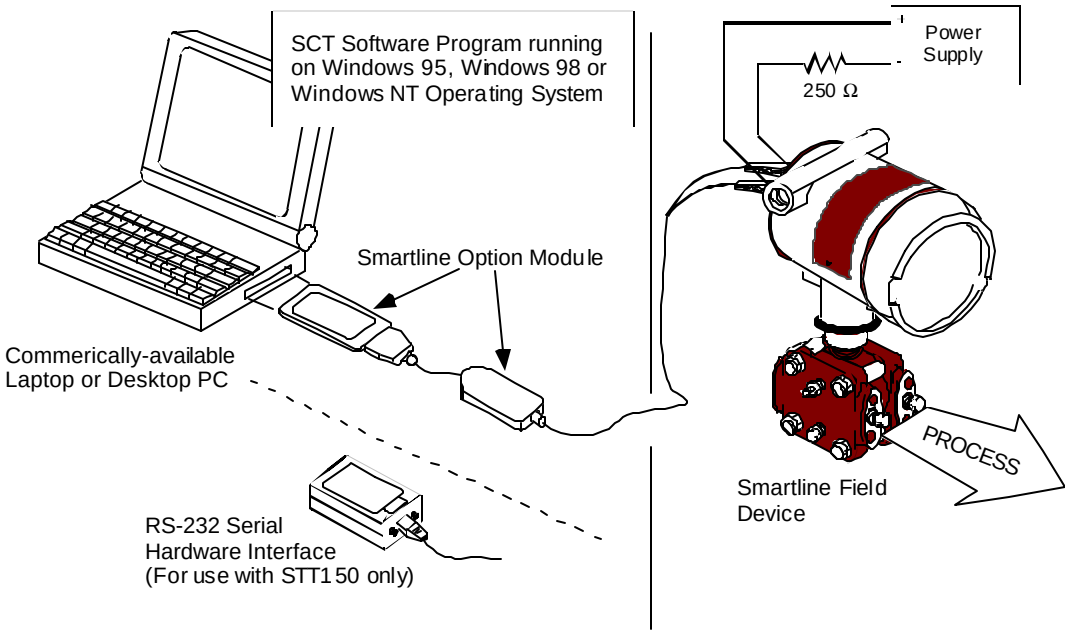

SCT Software Program running on Windows 95, Windows 98 or Windows NT Operating System
Power Supply
250 Ω
Smartline Option Module
Commerically-available Laptop or Desktop PC
PROCESS
Smartline Field Device
RS-232 Serial Hardware Interface (For use with STT150 only)

Figure 1 SCT 3000 Smartline Configuration Toolkit Overview

Field Devices Supported

The SCT 3000 operates and communicates with the following Honeywell Smartline field devices:

- **ST 3000** Smart Pressure Transmitter *
- **ST 3000** Smart Pressure Transmitter with integral meter
- **STT 3000** Smart Temperature Transmitter, (includes Series STT150, STT250 and STT350 tranmsitters)
- **SMV 3000** Smart Multivariable Transmitter
- **MagneW 3000** & **MagneW *Plus***

* Note that the SCT 3000 will not communicate with older ST 3000 transmitters that are analog only and contain software version 2.2 or earlier, or version 6.1 or earlier.

The *SCT 3000 Online User Manual* provides useful configuration and diagnostic information for the supported field devices. More detailed information for configuring and operating these field devices is found in separate user manual and operating guide documents that support each field device. See References on Page iii in the front of this document for a list of these documents.

SCT 3000 Features

The Smartline Configuration Toolkit has all of the following features:

- Windows-based software application allows easy access to all Smartline configuration and calibration device parameters.
  - SCT 3000 runs on computers with Windows 95, Windows 98, or Windows NT operating systems.
  - Employs familiar Windows tools that include an online user manual and context sensitive help.
  - Device database parameters are arranged and presented in logically grouped “tab card” displays.
- Online and Offline Mode operation
  - Offline mode allows you to configure and save database files for various devices without being connected to the device.
  - In the online mode you can download the saved databases to the devices and perform online functions such as:

    Selection of the Communications Mode (Honeywell DE or analog)
    Configuration and device diagnosis
    Calibration
    Display of device parameters
    Device check out
- Built-in Database Templates
  - Default database templates are provided for each type of field device to simplify and reduce implementation time and effort.

- Database Verification
  - Database parameters are checked for “reasonable” values automatically to help avoid mistakes.
  - A database compare function detects differences between the device database and the SCT database providing assurance of proper installation.
- PV Monitoring
  - Graphical representations of device inputs and outputs are shown in a window so you can monitor the operating status of Smartline field devices.
  - Window shows you values of input PVs, output PVs and SVs of the connected device in real time.
- Flow Wizard
  - A built-in wizard that provides considerable time savings and ease of use for you when configuring the flow process variable in a Smart Multivariable Transmitter (SMV 3000). By providing responses to configuration questions and choices in a step-by-step progression, you can configure the flow variable (PV4). Upon completion, a configuration solution is generated by the wizard that can be saved as a database file and downloaded to the field device.

Windows operating system references

Use of the SCT 3000 is based on the Windows 95, Windows 98 and Windows NT 4.0 operating systems. So, before you begin to use the SCT 3000 it is important to know how to perform basic operations with your computer and with Windows. The information and procedures presented in this manual assume you are already familiar with Windows. If necessary, you may find it useful to review the following reference manuals from Microsoft before proceeding:

- *Getting Started with Microsoft Windows* - a guide to setting up Windows on your system and a brief introduction to Windows.
- *Microsoft Windows User’s Guide* - provides a comprehensive description of Windows; includes explanations and procedures for first-time users, in addition to topics for advanced users.
- *Microsoft Windows Tutorial* - provides online instructions for using a mouse and for performing some basic tasks in Windows.

2— System Requirements

Before You Begin

Before you install the SCT on your computer and start using it, there are a number of system requirements for the computer you will be using that will ensure trouble-free installation and operation with the SCT 3000 application.

Computer Requirements

The SCT 3000 software application runs on a variety of commercially-available portable or desktop computer platforms that may also be shared with other applications. Table 1lists the system capabilities needed to install and operate the SCT 3000 application.

Table 1 SCT 3000 Computer Specifications - Minimum Requirements

PC Specification	Computer: Laptop or Desktop PC
CPU	Pentium 90 MHz or better
Display	SVGA (Monochrome or Color)
Operating System	Windows 95, Windows 98 or Windows NT 4.0 (Note: Windows 95b or greater is recommended.)
Pointing Device	Mouse or trackball-compatible device
Power Source	
Laptop PC	Battery powered (see Note 1)
Desktop PC	AC powered (see Note 1)
RAM	16 MB (32MB recommended). See Note 2.
Application Size	12 MB (application) + 5 kB per database file
Floppy Disk Drive	
Laptop PC	See Note 3
Desktop PC	(1) 3.5-inch, 1.44MB drive

PC Specification	Computer: Laptop or Desktop PC
CD ROM Drive	
Laptop PC	Optional
Desktop PC	4x or higher
Ports	Parallel: Printer (see Note 4) Serial: For STT150 support (See Note 3)
PCMCIA Slot	(1) Type II PCMCIA slot (see Notes 5 and 6)
Card & Socket Services (only if needed)	PhoenixCARD Manager Plus V3.1/3.2 (Phoenix Technologies, Ltd.) SystemSoft Card WizardPro 3.1

NOTES:

1. Computer power source (and laptop PC's battery charger and/or AC adapter) must be suitable for worldwide use: 50-60 Hz and 100-220 VAC operation; also, battery should provide enough capacity to power the PC Card without derating life by more than 10%.

2. Minimum RAM capacity is 4 MB, but ROM-based portable PCs may be able to run with only 2 MB.

3. These functions require laptop PCs to have a floppy disk drive, serial port or other mechanism for file transfers:
   - installation of SCT 3000 software and updates
   - configuration database import and export

4. SCT 3000 software supports any Windows 95 (or greater)-compatible printer.

5. The interface hardware requires a PCMCIA Type II slot; it may be necessary for the desktop computer to have a PCMCIA adapter installed to accommodate the interface hardware.
   Compatible PCMCIA adapters include Greystone Peripherals Card Dock GS315.

6. To use the SCT 3000 on a desktop computer without a PCMCIA slot, you must install a PCMCIA host adapter. See your Honeywell sales representative for more information.

Computer models for use with SCT 3000

The following computers, which are commercially-available portable or desktop PCs, have been performance-qualified by Honeywell for use with the Smartline Configuration Toolkit:

- COMPAQ Armada 1592
- COMPAQ Elite 5300
- Dell 466M desktop PC
- Dell Dimension XPS P90 desktop PC
- Dell Latitude CP
- Dell Latitude XP laptop PC
- Dell Latitude XPi laptop PC
- Dell Optiplex XMT P90
- Dell 433/T
- Dell 450/ME
- Dell Optiplex GXa
- Dell Optiplex GXi
- Gateway GS180
- IBM ThinkPad 600
- IBM ThinkPad 760XL
- NEC Versa 2730MT
- Panasonic Toughbook CF71
- Toshiba Tecra 550CD

The SCT 3000 operates on any computer platform listed above that meets the application's minimum specification requirements as listed in Table 1. The individual PC vendor furnishes detailed information of the user-supplied computer platform.

Software Compatibility

The SCT 3000 may coexist with the following application programs on a computer.

- Microsoft Word 6.0, Access 1.0, Excel 5.0, Office and Qsystem.

The import/export capabilities of SCT database files allow for only "tab" delimited text files.

Refer to Appendix B in this document for further information on software compatibility.

SCT Hardware

Communication between a computer running the SCT 3000 application and the field device is accomplished through one of two hardware interfaces:

1. The **Smartline Option Module** is used to talk to all Honeywell field devices supported by the SCT 3000, (except the STT 150). See Table 2 for specifications.
2. A **Serial Hardware Interface** is used only when communicating to the STT 150 smart temperature transmitter. See Table 3 for specifications.

Each of these hardware interfaces is described in Section 4, *Hardware Installation*.

Environmental specifications for SCT hardware

The SCT is designed to operate in a non-hostile, general purpose field environment. It is important to operate the SCT in an environment that is within the ranges for temperature, humidity, shock and vibration that are specified in Table 2 and Table 3.

WARNING

The SCT 3000 is **not** certified for use in hazardous locations .

Table 2 Smartline Option Module Hardware Specifications

Specification	Description
Communication Protocol	Compatible with Honeywell Smart Field Network (SFN).
Temperature Range	
Operating	0°C to +40°C (32°F to +104°F), ambient
Storage	-4°C to +55°C (25°F to +131°F), ambient
Operating Humidity Range (RH)	10-90%, noncondensing
Shock Range (LIM)	
Operating	5 G, maximum
Storage Range	15 G, maximum

Table continued on next page Þ

Specification	Description
Vibration Range (LIM)	
Operating	0.2 G, maximum (0-2 kHz, 0.75 mmP-P, maximum displacement)
Storage Range	0.5 G, maximum (0-2 kHz, 0.75 mmP-P, maximum displacement)
Weight *(PC Card, LIM + cables)*	0.5 lbs., maximum
Approval Bodies	
NORTH AMERICA	EMC Standards: FCC Class A
EUROPE	European EMC Standards: EEC Directive 89/336 (EMC) CE Mark

Table 3 Serial Hardware Interface Specifications

Specification	Description
Communication Protocol	
Computer interface	Compatible with RS232 Protocol
Field device inteface	Compatible with 5Vdc level or 3Vdc level
Baudrate	19200 bps, maximum 9600 bps, typical
Temperature Range	
Operating	0°C to +50°C (32°F to +122°F), ambient
Storage	-40°C to +85°C (-40°F to +185°F), ambient
Operating Humidity Range (RH)	10-90%, noncondensing
Electrical Isolation	250 Vac
Cable length	
Computer interface *(RS232)*	10 meters, maximum
Field device interface	3 meters, maximum
Weight *(Interface module + cable)*	0.5 lbs., maximum
Approval Bodies	Mark CE

3— Software Installation

SCT 3000 Installation

Installation of the SCT 3000 is broken down into two separate procedures:

1. Software installation

2. Hardware assembly and installation, (described in Section 4).

Note: Install the software first, before the hardware.

SCT 3000 Software Application and Setup

The SCT 3000 software application and Installation Utility are available on a CD ROM or 3.5" diskettes. Depending upon which media you choose for installation (CD or diskettes), follow the appropriate procedure in this section.

Running the installation utility

The SCT 3000 software application is installed on your computer using the installation utility. The utility creates all necessary directories, files, application groups and/or items to run SCT application. The utility also updates the registry and checks for adequate system resources, such as disk space and Windows version number.

The installation utility provides a step-by-step procedure for installing the SCT 3000 application on your computer. You must follow the procedure and the appropriate prompts in the utility to properly install the application. You cannot simply copy the files from the CD or diskettes to your hard drive.

It is recommended that you close any other applications you have running in Windows as these can greatly increase the time for installing your SCT 3000 application.

CD ROM Installation

The SCT 3000 CD is designed to automatically start the installation utility when you insert it in your computer's CD drive. On-screen prompts should guide you through the install program. Follow the procedure in Table 4 to run the installation utility and setup.

Table 4 SCT 3000 Application Installation from CD ROM

Step	Action
1	Insert the SCT 3000 CD into the CD-ROM drive.
2	If the SCT 3000 Installation Utility does not start after several seconds: • On the desktop of the computer, click on “My Computer” • Click on the CD drive icon. The SCT 3000 Installation Utility will start.
3	The Installation Utility will lead you through installation of the SCT 3000 application software. On-screen prompts allow you to choose options on where you want the SCT application installed.
4	Follow the on-screen instructions and answer the prompts to install the application software.
5	Wait for the *Setup Complete* dialog box to appear.
6	Remove the CD from the CD-ROM drive. Click “Finish” to exit. **You must restart the computer before you can run the SCT 3000 application.**
7	Go to Section 4 – *Hardware Installation* to assemble and install the SCT 3000 hardware.

3.5” Diskette Installation

The procedure in Table 5 provides the steps to run the installation utility using 3.5” diskettes. Once the utility starts, on-screen prompts should guide you completely through the setup and SCT 3000 application installation. Note that you must follow the on-screen instructions and answer the prompts to complete the SCT 3000 installation. You cannot simply copy the files from the setup disks to your hard drive.

Table 5 SCT 3000 Application Installation using 3.5” Diskettes

Step	Action
1	Make a backup copy of the original SCT 3000 setup disks and store them in a safe place.
2	Insert the **SCT 3000 Setup Disk 1** into the floppy disk drive of the computer.
3	Click the “**Start**” button. Select: ”**Settings**”, ”**Control Panel**”, ”**Add/Remove Programs**” From the Install/Uninstall tab card, select “**Install. . .**” and follow directions Click ”Next >” and then “Finish”.
4	Wait for the Honeywell SCT 3000 Installation Utility screen to appear. Click ”Next >” if you wish to continue and install the SCT 3000 application.
5	The Installation Utility will lead you through installation of the SCT 3000 application software. On-screen prompts allow you to choose options on where you want the SCT application installed.
6	Follow the on-screen instructions and answer the prompts to install the application software.
7	Wait for the *Setup Complete* dialog box to appear.

Step	Action
8	Remove the setup diskette from the floppy drive. Click “Finish” to exit. **You must restart the computer before you can run the SCT 3000 application.**
9	Go to Section 4 – *Hardware Installation* to assemble and install the SCT 3000 hardware.

4— Hardware Installation

SCT Hardware

As part of the SCT 3000 installation, you must assemble the hardware interface components and then connect them to the computer that you will use with the SCT software application. There are two hardware interfaces available for use with the SCT:

1. **Smartline Option Module** described below
2. **Serial hardware interface** (for use with STT 150 only) which is described later in this section.

Note: Install the software first, before the hardware.

Smartline Option Module

Smartline Option Module is used to connect and communicate with all Smartline field devices supported by the SCT 3000, except for the STT 150 transmitter. The components are illustrated in Figure 2 and described below.

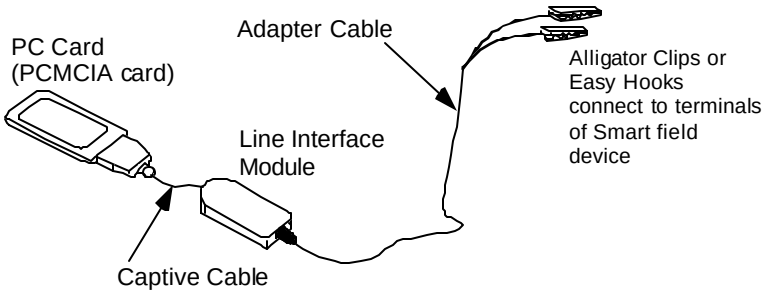


Figure 2 Smartline Option Module Components

The **PC Card** is a Type II PCMCIA-compliant interface card that provides the physical and electrical interface between the computer and the Line Interface Module (LIM).

The **Line Interface Module (LIM**) connects between PC Card and DE-based 4-20 mA loop (the module is powered solely from computer).

A **captive cable** connects the PC Card and the LIM.

The **adapter cable** is used to connect the LIM to the field device. The SCT is shipped with two adapter cables. One cable is equipped with easy hooks and the other has alligator clips at the field device end of the cable.

Smartline Option Module hardware assembly and installation

Perform the procedure in Table 6 to assemble and install the SCT 3000 Smartline Option Module hardware for the first time. See Figure 3 for reference during this procedure.

Table 6 Smartline Option Module Hardware Assembly and Installation

Step	Action
1	Ensure that the power to the computer (PC) is off.
2	Insert the keyed 22-position connector on the end of the LIM's (Line Interface Module's) captive cable into the 22-position receptacle on the exposed end of the PC Card (PCMCIA card) (see Figure 3). If you have trouble inserting the connector, try flipping it over and reinserting or verify that the retractable positive latch is retracted. Fasten the connector securely with the retractable positive latch.
3	Securely fasten the stereo phone jack end of one of the adapter cables into the connector on the opposite end of the LIM.
4	Carefully insert the PC card into the PCMCIA slot of the computer. Insert the card completely until it mates with the internal connector. See Note below.
5	Go to Section 5 – *Start up and Working Online* for information on connecting the hardware interface to a field device and starting the SCT 3000 application.

Note: If your computer does not have a PCMCIA slot, you can install a PCMCIA host adapter so that you can use the Smartline Option Module for online operation. See your Honeywell sales representative for more information.

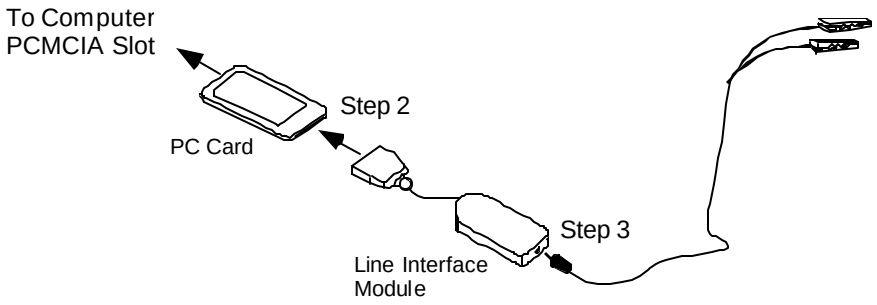


Figure 3 Smartline Option Module Assembly

CAUTION

To prevent component damage or loss of data during operation from electrostatic discharge, **always** note the following precautionary measures:

- Always connect or disconnect the PC Card and LIM from the computer as a single assembly.
- Never insert or remove the PC Card and LIM assembly from the computer while the SCT 3000 application is running.
- Separate the PC Card and LIM only for storage or transportation.

Serial Hardware Interface (for use with STT 150 only)

A serial hardware interface is available to use with the SCT 3000 when communicating with the STT 150 Smart Temperature Transmitter. The interface consists of the following components:

- **Serial Interface Module** which is an RS-232 standard hardware interface (9-pin D-type connector) that provides the physical and electrical interface between the computer and the field device. See Figure 4.
- An **Interface cable** connects the serial interface module to the field device. The cable features a 4-pin connector for the interface module connection and a 3-pin connector at the field device end.

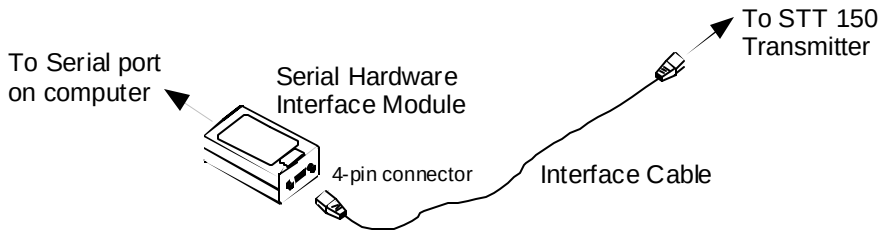


Figure 4 Serial Hardware Interface Installation

Follow the steps in Table 7 to assemble and install the serial interface hardware.

Table 7 Serial Hardware Interface Assembly and Installation

Step	Action
1	Ensure that the power to the computer (PC) is off.
2	Insert the 9-pin D-type connector of the serial interface module into an available serial port connector on the computer and secure using the two captive mounting screws. See Figure 4. **Notes**: • Connect the interface module to an available serial port (COM 1 or 2) on the computer for SCT 3000 use. • The COM port also must be set in the SCT 3000 application. See *Set COM Port* topic in the index of the Online User Manual for more information.
3	Insert the interface cable end (4-pin) into the 4-pin connector on the serial interface module.
4	Go to Section 5 – *Start up and Working Online* for information on connecting the hardware inteface to a field device and starting the SCT 3000 application.

5— Start up and Working Online

SCT 3000 Application

The SCT 3000 application is an easy-to-use graphical user interface that is similar in functionality to any other Windows-based application. Start up procedures consist of connecting the SCT hardware to a field device and establishing online communications with the devce. Also this section describes the SCT 3000 application window, its various components, and how to access the menus and commands to gain more insight into the SCT features.

Getting Online Quickly

The following procedures tell you how to:

- Connect the SCT 3000 hardware to a field device.
- Make an online connection to commnicate with a field device.
- Perfrom online tasks, such as view device parameters, check device status and perform online configuration or device calibration.

Connecting to a field device

WARNING

The SCT 3000 is **not** certified for use in hazardous locations .

ATTENTION

The SCT 3000 can be connected to only **one** Smart field device at a time.

Perform the procedure in Table 8 to connect the assembled SCT 3000 hardware between the computer and the Smartline field device.

Table 8 SCT 3000 Hardware Connections to a Field Device

Step	Action
1	The SCT hardware must be assembled and installed according to the procedures in Section 4. • If you are using the **Smartline Option Module**, follow the procedures in Table 6 to assemble the hardware. Then go to Step 2. • If you are using the **Serial hardware interface**, follow the procedure in Table 7 to assemble the hardware. Then go to Step 3.
2	If you are using the **Smartline Option Module**, Connect the easy hooks or alligator clips on the end of the adapter cable to the respective terminals on the Smart field device or field terminals as follows (See Figure 5.): -- connect the **red lead** to the **positive terminal**. -- connect the **black lead** to the **negative terminal**.

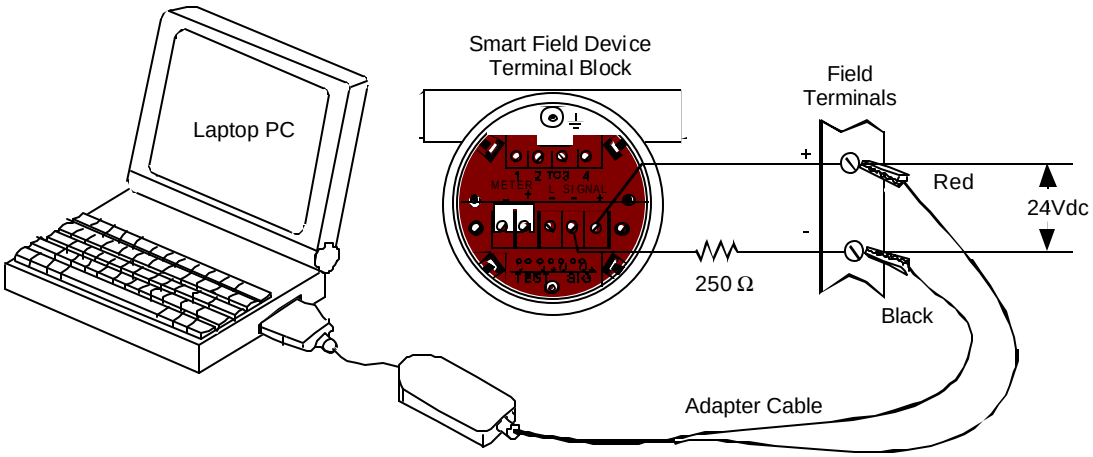


Figure 5 Smartline Option Module Connections to Field Device

The Smartline Option Module must be connected to a powered loop with at least 250 ohms of resistance.

ATTENTION

Do not disconnect or insert the PC Card (or serial interface module) to the computer while running the SCT3000 application.

Step	Action
3	If you are using the **Serial hardware interface**, plug the interface cable end (3-pin) into the connector on the STT150 transmitter. See Figure 6.

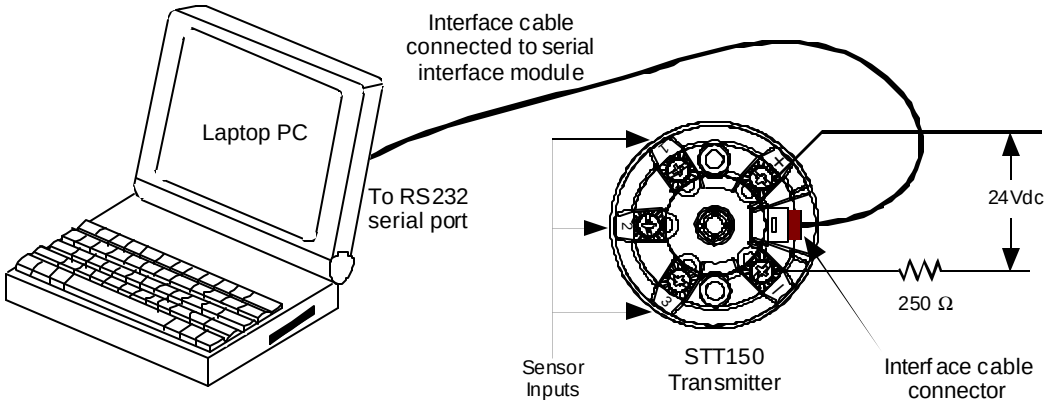


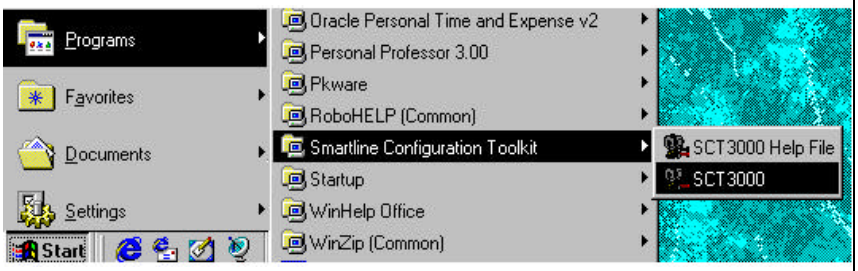
Figure 6 SCT 3000 Connections to a STT150

The Serial Hardware interface must be connected to a powered loop with at least 250 ohms of resistance.

Starting the SCT 3000 application

The steps in Table 9 tell you how to start the SCT 3000 application and establish online communications with the connected field device.

Table 9 Starting the SCT 3000 Application

Step	Action
1	Power up the computer and allow the PC to start up.
2	In Windows 95, 98 or NT: Click the "**Start**" button. Select: "**Programs**", "**Smartline Configuration Toolkit**", "**SCT 3000**" to start the SCT 3000 application. See figure.  **Note**: • Alternately, you can click the SCT 3000 icon from the computer desktop to start the SCT 3000 application. • The SCT 3000 main application window also offers the following file: SCT 3000 Help File – make this selection to access the SCT 3000 help system; refer to Online Help Features in Section 7 for a complete description of the online help system.

Step	Action
3	When the SCT 3000 Banner Window appears (see Figure 7), type in your designated user name in the name entry field. Note that you must enter a user name that is at least three (3) alphanumeric characters long. Any spaces before or after the user name string will be dropped off when the Banner Screen appears. Click the "Cancel" button at any time to exit out of the SCT 3000 banner window and application. Click the "Help" button at any time to access the SCT 3000 Help system.
4	Click "**OK**" to access the SCT 3000 application. The SCT 3000 application window (see Figure 8) immediately appears on the screen.

Figure 7 SCT 3000 Banner Window

Step	Action
5	Check the status bar at the bottom right of the application window. **CARD OK** or **SERIALOK** should appear to indicate that the SCT 3000 detects the SCT hardware and a connected field device. This is the online status of the SCT 3000. If not, a loose hardware connection or possible communications problem may exist. See Section 8, *Troubleshooting* and Appendix A.
6	In the **Device** menu: Select "**Upload**" (or click on the Upload toolbar button) to upload the current database configuration from the connected device and make the online connection. • A Communications Status dialog box displays during the uploading process.
7	When upload is complete, the online view of the connected field device appears on the screen. The window shows a number of tabs which contain various parameters that make up the device's configuration database. Access the Status tab by clicking on its tab. The Status tab is used to verify the status of the connected field device. • Separate boxes for Gross Status and Detailed Status messages are presented in the Status tab. Refer to the SCT 3000 online User Manual for explanations of each status condition.
8	Click on the various tabs in the application window to view configuration parameters and device status.

Note: See Section 6 – *Working Offline* for procedures to create new database files.

TIP

Once you have started the SCT 3000 application, you can access the online help topics and context-sensitive help that describe all features in the application window. See *Online Help Features* in Section 7. Also there is the online user manual that provides extensive information on how perform all offline and online tasks.

SCT 3000 Features

SCT application window

The SCT 3000 application window (see Figure 8) is the main window that appears when starting up the SCT 3000 application. This window allows access to all available SCT 3000 menus and commands.

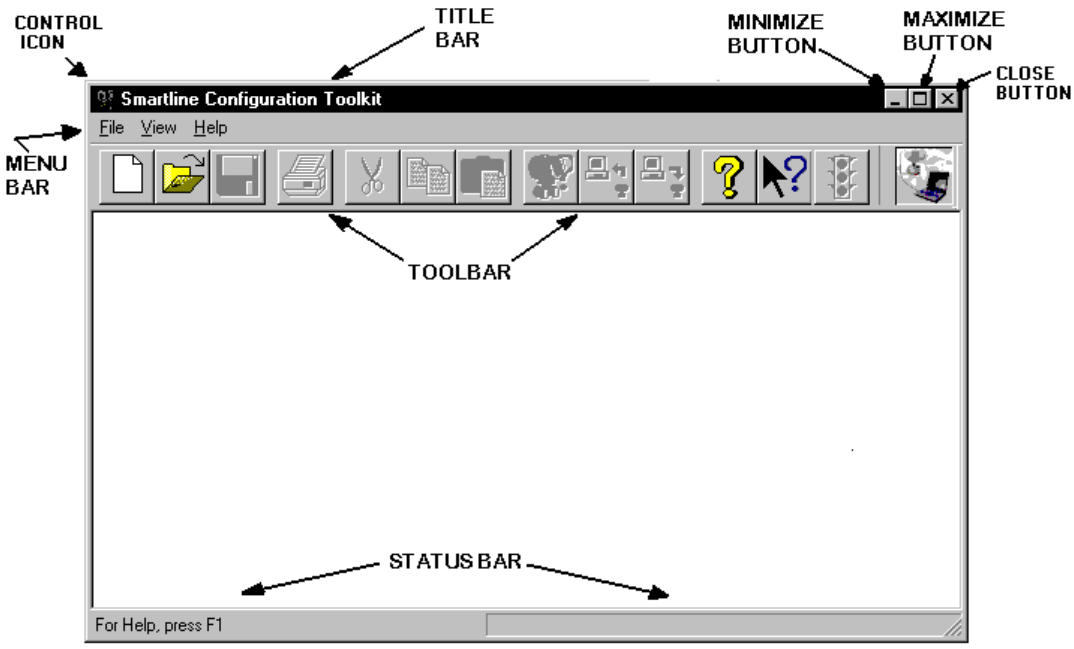


Figure 8 SCT 3000 Application Window

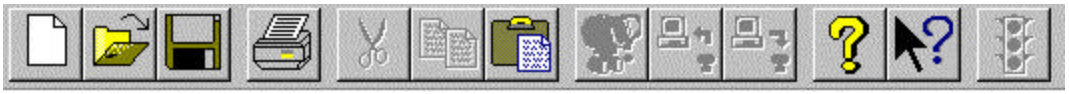
The functional elements in the SCT 3000 application window that are unique to the application are briefly explained here.

- **Control icon** displays the SCT icon at the left corner of the application window.
- **Menu bar** contains headings so you can access individual groups of drop-down menus and commands that are selectively available in the application.
- **Toolbar** appears across the top of the application window below the menu bar, when selected for display. The toolbar features a number of icons that provide quick mouse access to many commands used in the SCT 3000. To display (or hide) the toolbar, use the Toolbar command in the View menu.

- **Status bar** appears at the bottom of the SCT 3000 application window, when selected for display. The status bar tells you to press F1 key to access the online help and also displays the status of the online connection to the field device. To display (or hide) the status bar, use the Status Bar command in the View menu. See Section 8 for more information on status bar messages.
- **Standard application window features -** We assume you are already familiar with the concepts of the title bar, maximize, minimize and close buttons and scroll bars. If not, refer to the appropriate Windows manual for descriptions of each element.

Toolbar icons

The toolbar in the SCT application window contains a row of icons (shown below) that select commands frequently used when operating with the SCT. By moving the cursor over the icon, the name of the command is displayed. You can also use the context-sensitive feature to display the help topic about each icon.



Online vs. Offline

Working online with the SCT 3000 entails communicating with a field device that is connected to the computer via one of the hardware interfaces, as shown in Figure 9.

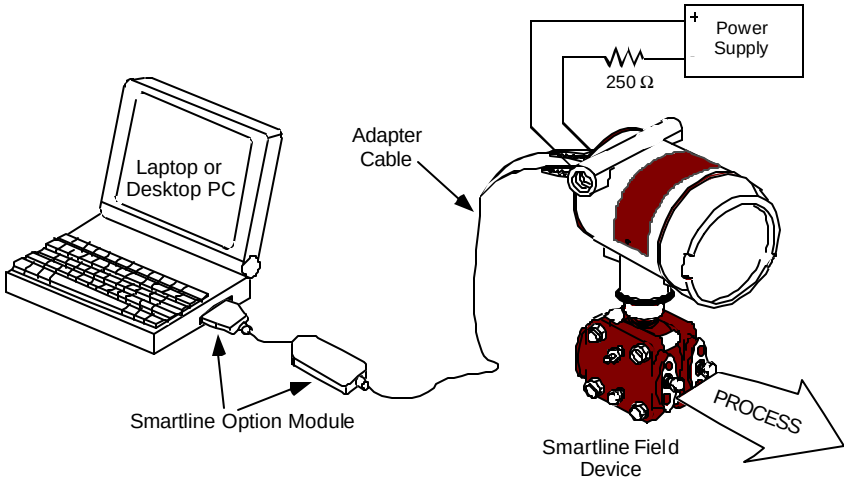


Figure 9 Online Operation Setup

Working online

Working online allows you to:

- Download a database file to the connected field device during installation or commissioning of your process application.
- Upload database from the connected field device to verify device configuration and make changes, if necessary.
- Monitor device output and status with the data and status being periodically refreshed. The PV Monitor display window graphically shows you values of input PVs, output PVs and SVs of the connected device in real time. View device status messages for detection, diagnosis and troubleshooting of possible fault conditions.
- Perform field calibration on the connected device.
- Change communications mode of the field device (analog mode or DE)

Working offline

Working offline means that you are using the SCT 3000 application without being connected to a field device. Working offline allows you to:

- Perfrom database management of database files. This entails creating or changing device configuration database files, saving the files to disk for downloading at a later time.
- Compare one database file with another. See Section 6 for more details.
- Print database files. See Section 6 for more details.

6— Working Offline

Using the SCT 3000 Offline

Working offline with the SCT 3000 means that you are using the SCT application without being connected to a field device. You can work at a location away from the field network. Working offline allows you to manage Smartline field device database files.

Database file management

You can create, copy, transfer and change configuration database files for supported field devices.

To create a new database file:

Step	Action
1	In the **File** menu, Select New, (or click on the "**New**" icon on the toolbar). The Add New Template dialog appears.
2	**Click on one of the three tabs** to display a list of available templates for supported field devices. – **Honeywell Templates** lists preconfigured templates for various models of Honeywell field devices. Use the Device Filter box to select templates for a particular device type. – **User Templates** shows a list of previously saved database file templates. – A **Generic Template** can be used to view and modify a device's extended parameter data.
3	**Select a template name** and click **OK**. The configuration tabs for the device type appear on the screen.
4	Now you can enter and change the parameters on the tabs for a specific device in a process application.
5	Click the "**Save**" icon on the toolbar and enter a unique filename for the device database file.

To open an exisitng database file:

Step	Action
1	In the **File** menu, Select **Open** (or click on the "**Open**" icon on the toolbar). The Open dialog will appear to show the existing database files (.sct) in the Templates folder.
2	**Double click on a file name** to open it. The configuration tabs for the device type appear on the screen.
3	Now you can enter and change the parameters on the tabs for a specific device.
4	Click the "**Save**" icon on the toolbar to save changes to the database file.

Parameter checking

When entering configuration parameters in a database file, the SCT 3000 automatically verifies and validates each selected parameter relationship with other parameters associated with the given field device. If entry of one parameter results in other parameters becoming invalid, the SCT automatically disallows entry of the invalid parameter. This ensures that the configuration can be downloaded to the field device without any resulting errors.

Printing a database document

The SCT 3000 actively maintains a printable document that provides summary information for the configuration (and Wizard) database associated with each Smart field device. Each document lists the individual parameters and associated values for each device's configuration database.

To print a database file:

Step	Action
1	The database file must open and the configuration window must be active.
2	Click on the "**Print**" icon on the toolbar. The Print dialog appears. If neccessary, select printer, page numbers and number of copies.
3	Click "**OK**"

Database Compare function

A Database Compare function in the SCT 3000 allows you to compare either two configuration windows for differences or the active configuration window and a designated configuration file.

To compare the database files of two configuration windows for differences:

Step	Action
1	In the **Device** menu, Select **Compare To… > Window….** The **Compare: Select Window** dialog will appear to show the other configuration windows open.
2	**Double click on a filename** to compare it to the active configuration window database.
3	A **Compare Results** window shows the differences between the two database files.

To compare the database file of the current configuration window to another database file:

Step	Action
1	In the **Device** menu, Select **Compare To… > File….** The Open dialog will appear to show the existing database files (.sct) in the Templates folder.
2	**Double click on a filename** to open the database file and compare it to the active configuration window database.
3	A **Compare Results** window shows the differences between the two database files.

Compare Results

The Compare Reuslts window shows a list of all parameters that are contained in both the current window and the designated window or database file but which contain different configuration values. Note that when an attempt to compare database files for two dissimilar devices, (for example an ST 3000 and an SMV 3000), the Compare Results will list only the Transmitter Type in the results window.

7— Online Help

Online Help Features

Online help features allow easy access to information for using the SCT 3000 application. Three types of help are built-in to the SCT.

1. **Online Help Topics** –SCT 3000 Help topics can be accessed through a Table of Contents or by using the Index and Find function. These functions enable you to locate information about specific topics while in any SCT window.
2. **Context-sensitive Help**– A help topic can be displayed on a particular item you select simply by requesting help and selecting the item.
3. **Online User Manual** – An online document that provides extensive information on how to configure, calibrate, diagnose and monitor the field devices supported by the SCT 3000.

Accessing help

Help topics can be accessed a number of ways.

- From the Help pull down menu, which is accessible from the SCT 3000 menu bar, choose a help category (see Table 10).
- Press `F1` while focused on a particular window, entry or selection field, menu item or dialog box option.
- Choose the Help command button that is available in many dialog boxes and configuration forms.
- Click on the context-sensitive help button on the toolbar and then click on any particular item.

Context-sensitive help icon is located on toolbar.

TIP

The Help topics and online user manual provide extensive information about SCT application features and all available online and offline tasks for field device operation.

Table 10 lists the Help menu selections available to you along with a description of the help feature.

Table 10 Help Menu Selections

Help Menu Selection	Help Feature
Tip of the Day ...	Displays help tips about using the SCT 3000 Smartline Configuration Toolkit.
Help Topics	Opens a window so you can access the SCT 3000 Help topics by using Help's Table of Contents or by selecting an Index or Find search function.
Contents	Opens a window that displays the "Contents for SCT 3000 Application Help" page which lists each top-level help topic in the general help application.
STT150 Operator Manual	Opens a copy of the STT150 Temperature transmitter operator manual. This selection is available only if you are connected to a STT150 transmitter.
User Manual	Opens the SCT 3000 online user manual, which lists the various sections of information available within the manual.
Using Help	Opens a window so you can access topics about using Windows help. These topics explain the basics on the Windows help structure and how to access help information. Note that SCT help topics operate similarly to the information contained in the Windows help.

8— Troubleshooting

Overview

If trouble arises, it may happen during installation of the SCT 3000 application or during normal operation. Due to differences in computer systems, problems are not always predictable. However this section seeks to provide some suggestions on possible remedies to problems that may occur during installation or operation of the SCT 3000 application.

First this section provides troubleshooting suggestions to help clear up problems. Next, is a listing of all the error codes and communication status messages that are generated by the SCT 3000 application. Last, information and phone contacts to reach Honeywell Technical Assistance are provided if the information in this manual or in the SCT application does not address or remedy a problem.

Troubleshooting SCT Application and PC Card Installation

Please note the following considerations when encountering problems with the SCT 3000 application or PC card installaton:

- You can install the SCT 3000 application software on a computer that does not have PCMCIA card slots or serial ports. The SCT 3000 will run correctly on these computers but you may only be able to operate in the offline mode.
- If your computer does not have a spare PCMCIA slot, you can install a PCMCIA host adapter so that you can use the Smartline Option Module for online operation. See your Honeywell sales representative for more information.
- When using the Smartline Option Module as the hardware interface, make sure that the SCT PC Card is inserted into the computer's PCMCIA card slot.

If you are encountering problems while running the SCT 3000 installation utility or if you are using the procedures in Appendix A to install and setup the PC card, use the troubleshooting Table 11 to find the symptom and refer to the action to correct the trouble.

Table 11 SCT 3000 Installation Troubleshooting Table

Symptom	Probable Cause	Corrective Action
The "Add New Hardware" dialog box appears when the PC card is inserted in the computer's PCMCIA slot for the first time	The computer does not recognize the PC card.	Remove the PC card from the computer slot and then install the SCT 3000 software.
Unable to complete setup procedure for SCT 3000 application installation.	Insufficient disk free space on computer.	Check to make sure that there is enough free disk space on the computer's fixed disk to allow installation of the SCT 3000 application and its associated files. The system requirements for application size are listed in Table 1.
For computers with Windows NT operating systems: Unable to run setup and installation utility for SCT 3000 application.	You do not have write (Admin) privileges in the directories specified for the installation.	See your system administrator.

Troubleshooting SCT 3000 Operation

To avoid problems that may occur during initial start-up of the SCT 3000 application, install the SCT 3000 software before installing any SCT hardware.

The troubleshooting Table 12 describes conditions that may occur when running the SCT 3000 application. Probable causes and things to do in order to correct the condition are also given.

Table 12 SCT 3000 Operation Troubleshooting Table

Symptom	Probable Cause	Corrective Action
Unable to establish online connection with field device. Status bar message: NO CARD or BAD CARD – COM UNKNOWN	Loose hardware connection between computer and field device.	Check all hardware connections.
	If you are using the Smartline Option Module:	
	a) Hardware components are not properly assembled.	a) See Section 4, Table 6 for assembly procedure.
	b) Hardware is not properly connected between the computer and the Smart field device.	b) See Section 5, Table 8 for connection procedure.
	c) PC card is not the current version (2.0 or greater) for use with the SCT 3000 release.	c) Check PC card version. In the Help menu, select: About PC Card… Obtain PC card that is version 2.0 or greater.
	d) PC card not recognized by computer. PC card disabled. (Windows 95/98 only).	d) Verify the PC card's disable setting in the computer's control panel. Select: Control Panel → System → Device Manager → Other Devices → SCT Option Module. Click on General tab. Verify that "Disable" or" Disable in this hardware profile" is NOT checked.
	e) The Smartline Option Module is not properly installed.	e) See Appendix A, Table 15 or Table 16 for PC card manual installation procedure.

Table continued on next page

Symptom	Probable Cause	Corrective Action
Unable to establish online connection with field device. Status bar message: NO CARD or BAD CARD – COM UNKNOWN	*If running Windows NT operating system:* PC card installed while computer is powered on.	Turn off power to computer before inserting PC card onto PCMCIA slot.
	If you are using the serial hardware interface: a) Hardware components are not properly connected. b) Serial port not selected. OR - c) Serial port being used by another application or device. (Other software applications running on the computer may use the serial port, thus making it "unavailable" for SCT 3000 communications.)	a) See Section 4, Table 7 and Section 5, Table 8 for hardware connection procedures. b) and c) Make sure that the serial port on the computer is available for use with the SCT 3000 serial hardware interface. In the SCT 3000 View menu, select Options… Click the General tab. Select a Serial port name that corresponds to the serial port on the computer. (If the computer port names are different, then type the computer's Serial port name into the edit box on the General tab.) Click OK.
Communication errors when trying to connect online to a field device.	a) Loose hardware connection between computer and field device. b) You are trying to communicate with a field device that is not supported by the current version of the SCT 3000.	a) Check all hardware connections. b) None. Refer to the Readme.txt file supplied with the SCT 3000 application for the latest list of Honeywell-supported Smart field devices.

Table continued on next page Þ

Symptom	Probable Cause	Corrective Action
Unable to see Input or Output Calibration tabs when in online mode.	Calibration not enabled in Options… dialog box.	In the View menu, Select Options…
Note: Calibraton tabs are not visible when operating in the offline mode. The computer that is running the SCT 3000 application must be connected to a field device to perform calibration. SCT 3000 software is designed to detect an online connection before it displays the Input Calibration and Output Calibration tabs.		Click the General tab. Check the Enable Calibration in the Customize Options box.
FlowAlg, Flow Setup, and Equation tabs are not visible in the SMV 3000 configuration window.	Expert Configuration not enabled in Options… dialog box	In the View menu, Select Options… Click the General tab. Check the Enable Expert Configuration in the Customize Options box.
PV Monitor window values not being updated.	Status Scan not enabled in Options… dialog box	In the View menu, Select Options… Click the General tab. Check the Enable Status Scan in the Status Scan box.
Unable to display PV Monitor window or use Flow Compensation Wizard.	An application extension file (*.DLL file) is missing or needs to be updated. Windows 95a does not include this DLL file.	The DLL file is available only with Microsoft Internet Explorer 4.01 SP1 or in Windows 95b, Windows 98 or Windows NT 4.0. See ATTENTION below.

ATTENTION *(For computers with Windows 95a operating systems)*

If your computer is running Windows 95a, an application extension file (*.DLL) is needed so that the SCT 3000 PV Monitor window and flow compensation wizard function properly. Windows 95a does not include this DLL file, but it is available with Internet Explorer 4.01 SP1. (The DLL file is included with Windows 95b, Windows 98 and Windows NT 4.0.)

To check if you have Windows 95a from the Windows desktop:
Click My Computer → Control Panel → System,
then select the General tab.

If you are running Windows 95a and cannot download or do not have Microsoft Internet Explorer 4.01, it is recommended that you upgrade to Windows 95B (OSR2), Windows 98 or Windows NT 4.0.

SCT Error Codes

Error code numbers identify a particular error that is displayed in an SCT dialog box, in reference to an invalid action. A text message describes the error or invalid action along with the error code for that particular error type. For example entering a value in a box that is not within the range of acceptable values will display the dialog box:

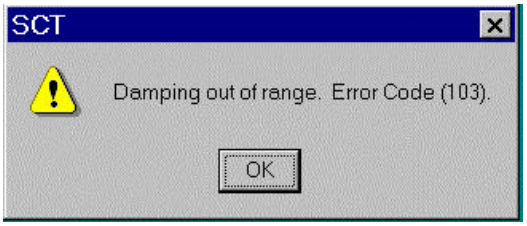


Table 13 lists the possible error codes that may appear with a message displayed in an SCT dialog box. The error code is used as a key to the table listing that may further define error and suggest a possible action to correct the problem.

Table 13 SCT Error Codes and Descriptions

Error Number	Error	Description
100	General	The transaction failed due to a request that was not valid for the current device configuration.
101	Invalid Parameter	The selected database item (parameter) could not be accessed because it is not valid for the current configuration.
102	Operation Pending	The transaction failed because another transaction is currently pending.
103	Out of Range	The entered value is not within the valid range.
104	Invalid Value	The entered value is not a valid floating point number. The acceptable floating point format is +MANTISSAe+EXPONENT.· For example> 6, -1.2, 34.5e-4, 6e8.
105	No Response	The attached Smart device did not respond. Make sure that the physical connection is secure.
106	Invalid Response	The attached Smart device did not respond properly since the response was not recognizable. The message was probably corrupted by external influences.

Error Number	Error	Description
107	Illegal operation	The requested transaction is not supported by the attached Smart device. Make sure that the device version is compatible with the current release of the SCT 3000. See the ReadMe.txt file supplied with the SCT 3000.
108	Local Mode	The attached Smart device could not process the request because it has been placed in local mode. No more transactions can be processed until local mode is disabled.
109	Transmitter Busy	The transaction failed because the attached Smart device is too heavily loaded and is unable to process communication requests.
110	Write Protected	The value could not be written because the attached Smart device is write protected. The hardware jumper within the device must be repositioned in order to permit write operations. The STT250 contains a write protection feature that uses a password key in the transmitter configuration.
111	Unable to Format Message	Some or all of the information required to format the desired communications message is not available. Make sure that all database items on the configuration tab cards have valid values.
112	Data Inaccessible	The requested data is inaccessible or not available.
113	Card Not Available	The DE PC card is not present or not functional Make sure that the card is completely inserted in the PCMCIA slot and that the appropriate drivers have been installed.
114	Communications Channel Not Available	The communications channel is temporarily unavailable.
115	No Message Pending	A message response is expected but none is available.
116	Communications Type Unknown	The transaction failed because the type of communications (analog or DE) could not be determined

Error Number	Error	Description
117	Communications Timeout	The transaction failed due to an internal timeout. The error is usually indicative of a condition that will require restarting the host computer.
118	Parameter Not Ready	Data from the requested database item has not yet been uploaded from the attached Smart device.
119	Parameter Unknown	The database item is valid based upon the current configuration, but its value is unknown (as indicated by a series of question marks -- ?????).
120	Download Failed	The download operation failed due to a problem with the current configuration or a communications error.
121	Serial Port is not available	The serial port is not available or is not functional. Loose hardware connection. Make sure that the physical connection is secure.

Status Bar Messages

The status bar at the bottom of the SCT 3000 application window contains four boxes on the right side of the bar. The last two boxes contain status of the communications link between the computer and the field device.

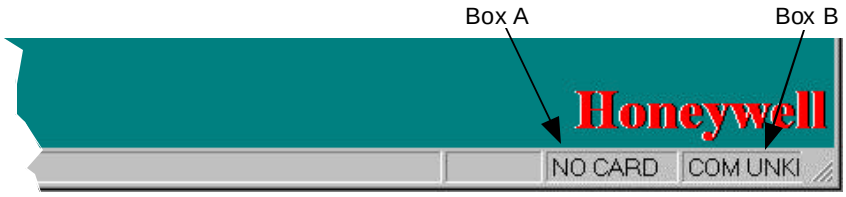


Table 14 describes the messages that are displayed in the boxes.

Table 14 Status Bar Communication Messages

Status	Description
Box A – Indicates the status of hardware interface.	
CARD OK	PC card and SOM hardware detected and is communicating.
SERIALOK	Serial Interface hardware detected and is communicating.
NO CARD	No PC card or serial interface detected.
NO LIM *	No Line Interface Module detected.
BAD CARD	Hardware interface fault.
Box B – Indicates the selected communications mode.	
ANALOG	Device is communicating in the analog mode.
DE4BYTE DE6BYTE	Device is communicating digitally (DE mode) in either a 4 byte or 6 byte format.
COM UNKNOWN	Indicates that the current view is not online.

* Smartline Option Module only

Honeywell's Technical Assistance Center

Technical support options

Honeywell offers various technical support options to help you get the most from the SCT 3000 application.

ATTENTION

Before contacting Honeywell's Technical Assistance Center (TAC), first try to resolve any apparent problems by referring to this section, this manual, or the online help system or user manual (if available).

By telephone

You can reach Honeywell's Technical Assistance Center for technical support by phone during normal business hours.

Honeywell Technical Assistance Center Phone: **1-800-423-9883**

You may also seek additional help by contacting the Honeywell distributor who supplied your SCT 3000.

By e-mail

You can also e-mail your technical questions or comments about this product to:

Honeywell Technical Assistance Center e-mail: **ace@honeywell.com**

Appendix A

PC Card Manual Installation and Setup

This appendix contains procedures to manually install and setup the PC card in the computer.

Normally, once the SCT 3000 software and PC card are installed in the computer, the computer is restarted. When the computer is connected to a field device and the SCT 3000 application is started, an online connection is automatically established, (status bar message CARD OK). If an online connection cannot be made, you may need to manually install the PC card and setup the PCMCIA socket (PC card slot) of the computer.

Also see Section 8 – *Troubleshooting* for additional information.

Use one of these procedures in this appendix only if you are using the Smartline Option Module as the hardware interface, and:

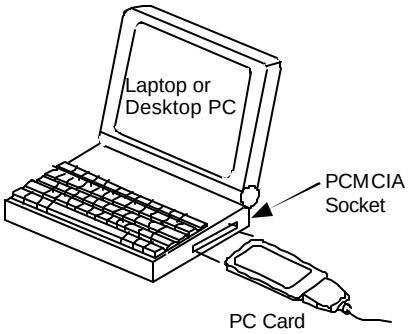
- You cannot make an online connection between the computer and the field device upon start up of the SCT 3000 application.
- The status bar message in the application window displays NO CARD. (The computer does not recognize the PC card.)

Depending on which operating system your computer is using, (Windows 95, Windows NT or Windows 98), you should use the procedure in either Table 15 or Table 16 to manually install and setup the PC card in your computer.

PC Card installation with Windows 95 and Windows NT

Follow the steps in Table 15 to install and set up the PC Card on a computer that is running Windows 95 or Windows NT operating system.

Table 15 PC Card Installation for Computers Operating with Windows 95 or Windows NT 4.0

Step	Action	
1	It is recommended that you close any other applications you have running in Windows 95 or NT 4.0 as these can increase the time for installing your PC card.	
2	Insert the SCT PC card into the PCMCIA socket on the computer. Refer to the figure. (The figure shows a possible location for a PCMCIA card socket on a laptop computer.)  	
3	**For Windows 95a or lower** When you insert the SCT card, the opening dialog box will be ***"New Hardware Found".*** **ATTENTION** If you do not see this dialog box, go to step 8**.**	**For Windows 95b (or NT 4.0)** When you insert the SCT card, the opening dialog box will be ***"New Hardware Found".*** **ATTENTION** If you do not see this dialog box, go to step 8.
4	Choose "Select from a list of alternate drivers". Click "OK". Go to step 5.	The "*Update Device Driver Wizard*" dialog box will appear. Click "Next >". The program will search for drivers for the SCT PC Card. Not finding any, the "*Windows was unable to locate a driver for this device*…" dialog box will appear. Click "Finish". Go to step 8.

<table>
<tr><th>Step</th><th colspan="2">Action</th></tr>
<tr><td>5</td><td>For Windows 95a or lower

The “Select Hardware Type” dialog box will open. Select “Other Devices” (NOT “Other Detected Devices”) then click “OK”.</td><td>For Windows 95b (or NT 4.0)

Still in the “Update Device Driver Wizard”, select “Other devices” (NOT Other detected devices) from the list below.

Click “Next >”.

— OR you may see —

Still in the “Update Device Driver Wizard”, select “Original driver, (Recommended)”.

Click “Next >”.</td></tr>
<tr><td>6</td><td>For Windows 95a or lower

The “Select Device” dialog box will open. “Unsupported Device” will appear in the field.

Click “OK”.

[if the “SCT Option Module Properties” dialog box appears, click “OK”]

Then click “Close” at the “System Properties” dialog box.</td><td>For Windows 95b (or NT 4.0)

Still in the “Update Device Driver Wizard”, the “Unsupported Device” will appear in the field.

Click “Finish”.

After two beeps (only on some systems), click “Close”, then “Close” again at the “System Properties” dialog box.</td></tr>
<tr><td>7</td><td colspan="2">Restart the computer so that the changes will take effect.

After the computer has been restarted, this procedure is completed.

Go to Section 5 – Start Up and Working Online.</td></tr>
</table>

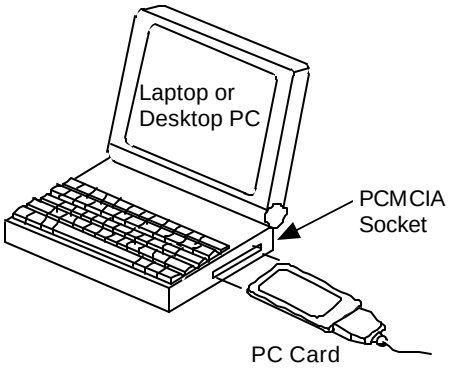
If you DO NOT see the "*New Hardware Found*" dialog box (in Step 3) proceed as follows:

Step	Action	
8	Press the "**Start**" button.	
9	Select: "**Settings"**, "**Control Panel**", Double click on "**System**". The "***System Properties***" dialog box will open.	
10	Select the "**Device Manager**" tab card. Click "**Refresh**". "Other Devices" will appear in the list of devices.	
11	Select "Other Devices" (NOT "Other Detected Devices").	
12	Select "Honeywell - SCT Option Module" that will appear under "Other Devices". Click "Properties". The *"Honeywell - SCT Option Module Properties"* dialog box will appear.	
13	**Windows 95a or lower** Select the "DRIVERS" tab, then click the "CHANGE DRIVER" button.	**Windows 95b (or NT 4.0)** Select the "Driver" tab, then click the "Update Driver. . ." button. The "*Update Device Driver Wizard*" dialog box appears. Select "No, Select Driver from List" then click "Next >".
14	**Perform steps 5 through 7 to complete the installation procedure.**	

PC Card installation with Windows 98

Follow the steps in Table 16 to install and set up the PC Card on a computer that is running Windows 98 operating system.

Table 16 PC Card Installation for Computers Operating with Windows 98

Step	Action
1	It is recommended that you close any other applications you have running in Windows 98 as these can increase the time for installing your PC card.
2	Insert the SCT PC card into the PCMCIA socket on the computer. Refer to the figure. (The figure shows a possible location for a PCMCIA card socket on a laptop computer.) 
3	When you insert the SCT card, the opening dialog box will be ***"New Hardware Found*** *– Windows has detected new hardware and is locating the software for it."* The "*Add New Hardware Wizard*" dialog box appears.

ATTENTION

If you do not see "*New Hardware Found*" or the "*Add New Hardware Wizard*" dialog boxes, go to Step 12.

4	Click "Next >"
5	Select "Display list of all the drivers . . . you want." Click "Next >".

Step	Action
6	Scroll down the list in the window and select “Other Devices” (NOT “Other Detected Devices”) Click “Next >”.
7	Still in the “*Add New Hardware Wizard*”, the window displays a list of manufacturers and models. Click “Next >”.

ATTENTION

A warning appears telling you that you are installing a driver that is not written for the SCT PC Card. In Windows 98, the SCT 3000 application directly interfaces to the PC Card, so it does not need a dedicated driver. The driver installed by Windows 98 is a generic driver that allows the SCT application to interface to the PC Card.

8	Click “Yes” to close the warning box.
9	Still in the “*Add New Hardware Wizard*”, the window displays “Window driver file search for the device: Unsupported Device.” Click “Next >”.
10	The screen will say, “Windows has finished installing the driver for an unsupported device. Click “Finish”.
11	Restart the computer so that the changes will take effect. After the computer has been restarted, this procedure is completed. Go to Section 5 – *Start Up and Working Online*.

If you DO NOT see "*New Hardware Found*" or the "*Add New Hardware Wizard*" dialog boxes (as in Step 3), proceed as follows:

Step	Action
12	Press the **"Start"** button.
13	Select: **Settings**, **Control Panel**, Double click on "**System**". The ***"System Properties"*** dialog box will open.
14	Select the **"Device Manager"** tab card, and then click the **"Refresh"** button. "Other Devices" will appear in the list of devices.
15	Select "Other Devices" (NOT "Other Detected Devices").
16	Select "SCT Option Module" that will appear under "Other Devices". Click the "Properties" button. The *"SCT Option Module Properties"* dialog box will appear.
17	Select the "Driver" tab, then click the "Update Driver. . ." button. The "*Update Device Driver Wizard*" dialog box will appear. Select "No, Select Driver from List". Click "Next >".
18	**Perform steps 5 through 11 to complete the installation procedure.**

Appendix B

SCT 3000 Compatibility

Some computers running particular Windows operating systems and/or containing particular hardware and software combinations may present interference to the SCT 3000 installation and operation. The known conditions are noted below along with possible solutions. See also Section 8 – Troubleshooting for additional information.

PC Hardware or Software Application	Condition	Solution
Softex PC Card Executive Software that may be pre-installed on some laptop comupters running **Windows NT 4.0.**	Software application does not recognize the SCT 3000 PC Card driver installed by the SCT 3000 setup program.	Uninstall the Softex PC Card Executive Software. See *Softex PC Card Executive Software* below.
The **DACOM Gold Card PCMCIA Modem** installed on a laptop computer and the **Softex PC Card Executive** Software Software is uninstalled.	The DACOM Gold Card PCMCIA Modem no longer functions and causes additional problems when trying to use Outlook or the modem.	Substitute a **US Robotics 56K PCMCIA Modem**. Note: The DACOM Gold Card PCMCIA Modem is difficult to configure and requires the Softex PC Card Executive Software to help the user configure the modem.
Computers running **Windows NT 4.0.**	Windows NT 4.0 does not support "hot swapping" of PCMCIA cards and requires that the PCMCIA card be inserted before powering up the computer.	**Cardware® 6.0 for Windows NT 4.0** is available from Award Software/Phoenix Technologies if you require the computer to support "hot swapping" of PCMCIA cards.
Computers running **Windows 95a (or greater).**	PCMCIA card support problems when converting the English version of Windows 95 over to other languages.	Upgrade your computer to either **Windows NT 4.0 or Windows 98**. Note: If upgrading to Windows NT 4.0, you must re-install the SCT 3000 application to add the SCT 3000 PC Card Driver.

Softex PC Card Executive Software

The Softex PC Card Executive Software, when installed, allows Windows NT 4.0 to support "hot-swapping" of PCMCIA cards. Normally Windows NT 4.0 does not support "hot-swapping" of PCMCIA cards and requires that the PCMCIA card be inserted before powering up the computer.

To de-install Softex PC Card Executive Software

Using the Control Panel and uninstall the SCT 3000 Software:

1. Use the NT Explorer to find and select the directory "*c:\Program Files\Softex\PCCard32*
2. After selecting the directory, select the menu "edit-copy"
3. Select the directory "*c:\Program Files\Softex*",
4. Select the menu "edit-paste" and paste the contents into a new directory called *"c:\Program Files\Softex\Copy of PCCard32*"
5. Select "*c:\Program Files\Softex\PCCard32*"
6. Select and double click "uninstl.exe" this will uninstall the program and delete the files from "*c:\Program Files\Softex\PCCard32*" directory.
7. The original setup program files that were in now in the directory you created in step (4).
8. Allow the laptop or PC to re-boot (if you are not asked if you want to reboot the laptop then manually re-boot the PC).
9. Re-install the SCT 3000 software.

ATTENTION

Note that the SCT 3000 application is not compatible with Norton File Assist. The SCT 3000 Setup program is coded to detect the presence of Norton File Assist on the computer and, if present, adds a line to the program to ensure that Norton File Assist does not run with the SCT 3000 application.

Glossary

Term	Meaning
Analog (R100/R200) Protocol	The Honeywell-proprietary *analog* communications protocol for *Smartline* field instruments as defined by the Smart Field Network (SFN) Specification.
DE (Digitally Enhanced) Protocol	Honeywell-proprietary *digital* communications protocol for *Smartline* field instruments as defined by the Smart Field Network (SFN) Specification.
Download	Refers to the action of transferring an SCT 3000 configuration database file from the host computer to a connected Smart field device.
GUI	Graphical User Interface is a term for the graphical images displayed on the computer screens that are generated to simplify the interpretation and selection of data or actions by the computer user.
Line Interface Module (LIM)	A hardware assembly that contains the Physical Layer interface to the communications network. It connects between the PC Card and the communications network.
PC	Personal Computer
PC Card	Refers to the physical card itself, as defined by the Personal Computer Memory Card International Association (PCMCIA).
PCMCIA	The Personal Computer Memory Card International Association standard for credit card-size electronic modules for personal computers. Three standard thicknesses are presently specified, identified as Type I, II and III. PCMCIA cards are an increasingly popular packaging format for modems, network interface cards, solid-state memory, hard drives, etc.
Smart Field Network (SFN)	Refers to the Honeywell Smart Field Network (SFN) protocol that defines communication mechanisms for Honeywell analog and digital field devices.
Tag ID	Refers to an ASCII field used to uniquely identify a field device at a specific customer location
Upload	Refers to the action of transferring the field device's data to an SCT 3000 configuration database window.

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